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IN THE MOOD: THE EFFECT OF ELECTION YEAR CONSIDERATIONS  
UPON THE APPROPRIATIONS PROCESS

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An earlier version of this paper was delivered  
at the Annual Meeting of the Midwest Political  
Science Association, Cincinnati, Ohio,  
April 15-18, 1981.



**SOCIAL SCIENCE WORKING PAPER 429**

July 1982

## ABSTRACT

The analyses undertaken in this study generate evidence supportive of the hypothesis that Congress treats the budgets of agencies which supply particularistic, constituency-oriented benefits more favorably in election years than nonelection years. There appears not to be any greater election year generosity on the part of Congress with regard to those agencies which perform primarily universalistic services. The data also show that congressional appropriations decisions regarding the constituency-oriented agencies are also influenced much more strongly by the level of unemployment in the economy and by the balance of party power in the federal government. It must be stressed, though, that the impact of congressional election year appropriations process is quite limited. This is because over all changes in agency appropriations are much more a function of the budget estimates submitted to Congress by OMB than of what Congress does to these estimates. And given that there were no important differences evident in OMB behavior between election years and nonelection years, over all trends in actual appropriations were not much affected by election year considerations either.

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I. INTRODUCTION

In The Power of the Purse, Fenno (1966) described Congress as usually being in an "economy mood." As long as the well-being of their districts (and thus, they believed, the well-being of their own political careers) was not directly affected, most congressmen generally supported the norm of appropriating somewhat less money than requested to federal agencies. During the eighteen years Fenno observed appropriations politics in Congress, the virtue of budgetary frugality was exemplified by the attitudes and behavior of members of the Appropriations Committee, and magnified by the powerful role this committee played in the House.

But sometimes, according to Fenno's account, the House and/or Senate would be overtaken by a different mood. Hesitating to call it a "spending mood," Fenno described it instead as simply a more "permissive" attitude toward spending. During such periods Congress would become more anxious to avoid the pitfalls of "false economy," and place greater emphasis on making sure federal agencies received adequate levels of funding with which to carry out authorized programs.

The basic hypothesis to be examined in this paper is that the mood of Congress is influenced by the proximity of election day. More specifically, we would expect Congress to be more generous in its

treatment of agency budgets in election years than in nonelection years. To be sure, the years Fenno cited as characterized by economy moods (1951, 1952, 1957) or permissive moods (1954, 1955, and 1958) do not line up exactly with the electoral calendar. He did, however, see the desire for reelection as facilitating permissiveness, as have most congressional scholars. Tufte (1978), for instance, points out that in some election years the discount rate on austerity programs is so high as to simply rule them out of serious consideration (p. 60).

An increase in the saliency of electoral imperatives, furthermore, should have the most impact upon the budgets of those agencies which supply benefits directly to important groups in congressmen's constituencies. Such groups, of course, are the major source of money and other resources congressmen need for their reelection campaigns; as many congressional scholars have observed, the dictum of "looking after one's district" is, to most members, roughly equivalent to looking after the major interest groups in one's district. True, at no time are congressmen actually enthusiastic about trimming programs which aid key interests in their districts, but we would expect that calls for economy in these areas fall upon especially deaf ears as the second session of a Congress comes to a close.<sup>1</sup> We would also expect some reelection-minded members to step up their efforts at securing more benefits for their districts as election day approaches. Indeed, the classic symptom in Fenno's diagnosis of a "permissive" mood was a flurry of floor amendments boosting funding for constituency-oriented programs:

Three program areas in which the greatest number of proposals for floor increases were made and succeeded were . . . Public Works, Interior, and Agriculture. The characteristic which these policy areas share is the large number of programs which are constituency-oriented. For most of the items in these appropriations bills, there is a House member or a cluster of House members whose constituents are its direct and certain beneficiaries. [pp. 487-488].

Specific agencies cited by Fenno as having cashed in on a permissive mood in Congress were the Extension Service, the Fish and Wildlife Service, the National Park Service, and the Bureau of Mines (pp. 488-491). It is federally funded construction projects, though, which reelection-minded congressmen especially value, because they can claim full responsibility for having procured the project and its attendant benefits [Fenno, 1966; Mayhew, 1974; Ferejohn, 1974; Fiorina, 1977]. It would seem likely, therefore, that election year generosity would especially favor those agencies which sponsor government construction projects.

Probably the best way to begin this analysis is to simply examine congressional treatment of agency budget estimates submitted at the beginning of each session by the Office of Management and Budget (formerly the Bureau of the Budget). It would be very unwise, however, to look at the appropriations decisions made by Congress in isolation from the rest of the budgetary process. It is highly unlikely that OMB budget estimates for government agencies are made without at least some consideration of likely congressional action. In particular, these estimates may reflect anticipation of greater congressional generosity in election years. The exact form such a

strategy would take, unfortunately, is not obvious. OMB might attempt a simple compensating approach and submit somewhat lower budget estimates in election years. Alternatively, they might submit somewhat higher estimates, thus bending a little in order not to provoke Congress into even greater permissiveness.<sup>2</sup> This study will explore both possibilities.

Perhaps most importantly, we must not lose sight of the bottom line—the actual appropriations which government agencies end up receiving. We may find effects associated with election year considerations in congressional action on agencies' budgets, in OMB anticipation of what Congress will do, or in both places. The question here, however, is whether or not government agencies—especially those which supply direct, constituency-oriented benefits—experience more budgetary growth in election years. Subsequent analyses undertaken in this paper will attempt to answer this question as well.

Before proceeding, there is a final point which should be made about what we are not attempting to do. This study is not looking for a congressional source of political business cycles. Such cycles, of course, are hypothesized to result from more expansive fiscal and/or monetary policies which incumbent politicians pursue at optimal times so as to effect a surging economy on election day. As will soon be seen, though, the agencies and programs analyzed in this study are only a large sample of those in existence. They do not include the "big ticket" national defense and transfer payment programs, and thus

account for only a small fraction of total government spending. Furthermore, the appropriations figures to be analyzed provide virtually no information about the actual timing of government expenditures. The budgetary or "check-writing" authority they represent can be for activities which extend many years into the future. And the budgets which are acted upon in election years are for fiscal years which (especially since 1977) are barely under way by election day.

In short, the data to be examined can shed no light on the willingness or ability of politicians to influence the short-term course of the economy. Our concern, however, is with the somewhat narrower question of whether the heightened salience of the electoral connection during election years influences the appropriations process. For this purpose these data are suitable.

## II. ELECTION YEARS AND CONGRESSIONAL APPROPRIATIONS DECISIONS

As discussed above, the basic hypotheses to be tested in the following analysis are:

- $H_1$ : Congress is more generous in its treatment of agency requests in election years than in nonelection years.
- $H_2$ : The tendency for Congress to treat agency requests more generously in election years is strongest for those agencies which supply particularistic, constituency-oriented benefits.

The dependent variable in the following analysis, then, is the percentage change Congress makes in agency budget estimates submitted by the Office of Management and Budget (formerly the Bureau of the Budget). These values were derived from the estimates and final appropriations figures for 37 executive agencies reported in regular annual appropriations acts from fiscal year 1948 through fiscal year 1979.<sup>3</sup> Many agencies often receive additional amounts of funding in supplemental and deficiencies acts. These figures are almost always quite small, however, and including them in the agencies' yearly appropriations totals would have little effect upon the results of this analysis.<sup>4</sup> On the other hand, the validity of our findings probably would be compromised by the substantial inflation which occurred during this 32-year period. Estimates and appropriations figures were thus divided by the Commerce Department's Implicit Price Deflator for Federal Government Purchases of Goods and Services in order to convert them into constant dollars.

[TABLE 1 HERE]

This sample of agencies, listed in Table 1, contains all but 3 of the 36 agencies examined by Fenno.<sup>5</sup> These agencies were assigned to one category or the other on the basis of the description of their activities contained in the United States Government Manual and other sources. As Fenno noted, most of the agencies which supply large proportions of particularistic, constituency-oriented benefits are either in the Agriculture and Interior Departments or are considered

TABLE 1<sup>a</sup>AGENCIES CATEGORIZED BY THE NATURE OF THEIR BENEFITS<sup>a</sup>AGENCIES SUPPLYING PARTICULARISTIC,  
CONSTITUENCY-ORIENTED BENEFITS

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Extension Service  
Farmers Home Administration  
Rural Electrification Administration  
Soil Conservation Service  
Forest Service  
Bureau of Reclamation  
Bureau of Land Management  
National Park Service  
Bureau of Indian Affairs  
Fish and Wildlife Service (1948-71)  
Bureau of Mines (1948-74)  
Bonneville Power Admin. (1949-75)  
Office of Education  
Public Health Service (1948-69)  
Office of Voc. Rehab. (1948-68)  
NASA (1960-79)  
Corps of Engineers  
Military Construction (1960-79)  
Economic Dev. Admin. (1966-79)

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AGENCIES SUPPLYING PRIMARILY  
UNIVERSALISTIC BENEFITS

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Food and Drug Administration  
Patent Office  
Weather Bureau (1948-66)  
Coast and Geodetic Survey (1948-66)  
Geological Survey  
Bureau of Standards (1948-73)  
Census Bureau  
Federal Bureau of Investigation  
Immigration and Naturalization Service  
Federal Prison System  
Bureau of Narcotics (1948-69)  
Bureau of Customs  
Bureau of the Public Debt  
Secret Service  
Internal Revenue Service  
Bureau of the Mint  
Bureau of Labor Statistics  
Bureau of Labor Standards (1948-68)

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<sup>a</sup> Most agencies in this and the succeeding analysis existed continuously from FY 1948 through FY 1979. If they did not, the years in which they were in existence are reported.

in the Public Works Bill.<sup>6</sup> In many cases the placement of an agency in the first category is also corroborated by the scholarly attention it has received in the "subgovernment" literature, which documents the symbiotic relationship between a particular congressional committee, agency and interest group. Finally, this category was augmented by the inclusion of 3 other programs and agencies which sponsor large construction projects—the Corps of Engineers, Military Construction, the Economic Development Administration—and by the inclusion of the National Aeronautics and Space Administration, whose activities are concentrated in a number of specific locations.

In contrast to agencies in the first category, agencies in the second perform services which are not directed toward specific interest groups, locations, or segments of the population, and consequently are not the recipients of strong interest group support. Most are engaged in the routine operations of the federal government, e.g. law enforcement, revenue collection, and minting currency. The others promulgate protective standards and regulations, or are engaged in the public provision of scientific, economic, or demographic data.

A classification scheme as simple as this one, of course, blurs over a number of important distinctions. The benefits supplied by some agencies in the first column accrue in a more direct and concentrated fashion to a specific constituency group than do others. These agencies also differ considerably in how geographically concentrated their beneficiaries are; recipients of power supplied by the Bonneville Power Administration, for example, reside in several

congressional districts in the Pacific Northwest, while the Office of Education funded school construction in every district in the country. It is also true that the character of some agencies changes over time; the rise of the Sagebrush Rebellion in several Western states, for example, suggests that the Bureau of Land Management is no longer as completely beholden to local ranching interests as McConnell's (1966) study had indicated.

There were also a few agencies which did not fit as cleanly into the second category as we would have liked. To be sure, a purely universalistic good probably exists only in theory--some groups or individuals are always going to derive more benefit from a public good than others. But we did have some reservations with the Bureau of the Mint and Federal Prison System, which operate facilities in a fairly small number of specific locations, and which were occasionally appropriated relatively large amounts of funds for new construction. It is also the case that advertisers, real estate developers, and similar businesses have come to make heavy use of Census Bureau data, and that the Customs Service has recently won considerable favor from domestic clothing and appliance manufacturers for its vigorous efforts in enforcing anti-dumping and counterfeit label statutes. For the most part, however, the benefits provided by these agencies were not, during the time period under consideration, targeted at a particular interest group or segment of the population. On the whole, then, the agencies listed in Table 1 generally reside quite comfortably in the category to which they have been assigned.

In order to accurately estimate the effects of election year considerations it is necessary to take into account a number of other variables--institutional, economic, and political--which also affect congressional appropriations decisions. Perhaps the most immediate influence upon what Congress does in this regard is the behavior of the Office of Management and Budget. There is considerable evidence that Congress tends to act like an appeals court (Sharkansky, 1965; Wanat, 1978). Additional funds are often granted to an agency for whom OMB submitted a low estimate. Conversely, an agency whose OMB estimate represents a big jump over its appropriations in the previous year can expect somewhat less favorable treatment from Congress.

Economic conditions also appear to influence congressional appropriations decisions. Fenno (1966), for instance, believed that the onset of the 1954 and 1958 recessions helped trigger a "permissive mood" in those years. Davis, Dempster, and Wildavsky (1974) indicate that the already high statistical predictive power of their budget equations was often enhanced by the specification of a battery of economic variables. The received wisdom of at least some macroeconomists is that governments should decrease spending in response to inflation and increase spending in response to unemployment. We will hypothesize, then, that high rates of unemployment will lead Congress to treat OMB budget estimates more generously, but high rates of inflation will produce less favorable congressional treatment.

Another factor which exerts a clear, continuous influence upon

the appropriations process is party politics, or, more specifically, whether the Congress and the Presidency are controlled by the Democrats or by the Republicans. Fenno's study, based primarily upon the Truman and Eisenhower administrations, illustrated marked patterns of partisan conflict and cooperation between Congress and the President. In the years during the Truman administration in which they controlled Congress, the Republicans slashed agency estimates, especially in the areas of labor programs and public power. The Democratic Congresses of the Eisenhower and Nixon years, on the other hand, generally cut much less from OMB estimates, and often appropriated more than OMB had requested.

The actual model to be estimated, then, is the following form:<sup>7</sup>

$$\Delta \text{CONG}_i = \alpha_i + \beta_{1i} \Delta \text{OMB}_i + \beta_{2i} U + \beta_{3i} I + \beta_{4i} P + \beta_{5i} E + \mu_i$$

where  $\Delta \text{CONG}_i$  = the change Congress makes in an agency's OMB budget estimate in awarding appropriations, as a percentage of that estimate.

$\alpha_i$  = a constant term.

$\Delta \text{OMB}_i$  = the percentage change represented by the OMB budget estimate for an agency over the appropriations awarded to that agency in the previous fiscal year.

$U$  = the average rate of unemployment in the previous fiscal

year (computed from monthly data provided by the Bureau of Labor Statistics).

$I$  = the percentage change in the Consumer Price Index during the previous fiscal year.

$P$  = the party agreement index. This variable takes on the value of 0 when the Congress and Presidency were controlled by the same party, +1 when Congress was controlled by the Democrats and the President was a Republican, and -1 when the Congress was controlled by the Republicans and the President was Democratic.

$E$  = a dummy variable which takes on the value of 1 for budgets considered during election years (the second session of each Congress), 0 otherwise. It should be noted that appropriations decisions concern the upcoming fiscal year. So while congressional elections are held in even-numbered years, the budgets considered by Congress just prior to the election are for odd-numbered fiscal years.

To summarize, we expect the signs of the election year dummy to be positive, and the coefficients to be larger for those agencies supplying direct, constituency-oriented benefits than for those which supply largely universalistic benefits. Signs of the OMB terms are predicted to be negative, as we have hypothesized Congress to treat



relatively small OMB estimates more generously and relatively large estimates with less generosity. Estimates of the unemployment terms should be positive in direction, while those of the inflation term should be negative. And if Democrats do favor greater budgetary growth than Republicans, estimates of the party agreement should be positive. Finally, it should be noted again that these equations are attempting to predict the percentage change Congress makes in OMB budget estimates for these agencies. They are different in form from the budgetary equations Dempster, Davis, and Wildavsky (1966, 1973) estimated, which attempted to predict the actual amount Congress appropriated by the amount of the OMB estimate. These variables, of course, both exhibit a strong upward trend over time, and thus their equations usually produced very high  $R^2$ s (.95 and higher). The percentage change variables being used here, however, do not incorporate these trends, and so we should not expect the  $R^2$ s for our equations to be as high.<sup>8</sup>

The results of this analysis are reported in Table 2. The top numbers in each entry are the unstandardized OLS regression coefficients, the numbers in parentheses below are the standard errors. OLS estimates may be biased if a large amount of serial correlation is present. The Durbin-Watson statistics reported in Table 2, though, are quite well-behaved; in only 6 of the 37 equations are they less than 1.5 or greater than 2.5.

[TABLE 2 HERE]

TABLE 2

THE EFFECT OF ELECTION YEARS AND OTHER POLITICAL, ECONOMIC,  
AND INSTITUTIONAL VARIABLES UPON CONGRESSIONAL APPROPRIATIONS DECISIONS

	c	ΔOMB	U	I	P	E	R <sup>2</sup>	D.W.
<u>Agencies Supplying Particularistic, Constituency-Oriented Benefits</u>								
Extension Svc.	-.046	-.083 (.051)	.013* (.005)	.000 (.001)	.019* (.011)	.018 (.012)	.42	2.16
Farmers Home Administration	-.108	-.161 (.117)	.014 (.028)	.008 (.011)	.117* (.064)	.052 (.069)	.24	2.19
Rural Electri- fication Admin.	-.062	-.194** (.057)	.010* (.004)	-.003** (.001)	.014 (.010)	.014 (.011)	.52	2.24
Soil Conservation Service	.012	-.402** (.112)	.006 (.008)	-.005* (.003)	.024 (.018)	.011 (.021)	.40	2.33
Forest Service	-.083	-.102 (.100)	.023* (.010)	-.000 (.003)	.021 (.020)	-.015 (.023)	.25	1.83
Bureau of Reclamation	-.147	-.031 (.054)	.019 (.014)	-.005 (.004)	.068* (.032)	.003 (.036)	.34	1.75
Bureau of Land Management	-.073	-.114* (.053)	.005 (.008)	.002 (.002)	.024 (.018)	.030 (.020)	.28	1.81
National Park Service	-.149	-.023 (.045)	.020* (.010)	-.004 (.004)	.064** (.022)	.012 (.025)	.45	1.85
Bureau of Indian Affairs	-.157	-.191** (.053)	.024 (.007)	-.003 (.002)	.051* (.016)	.029 (.018)	.69	1.97
Fish and Wild- Life Service	.037	-.141* (.061)	-.000 (.014)	-.017** (.004)	.047* (.024)	.035 (.025)	.74	1.46
Bureau of Mines	-.167	-.004 (.078)	.020 (.013)	-.002 (.004)	.069* (.022)	.044 (.027)	.53	2.11
Bonneville Power Administration	-.157	.065 (.060)	.004 (.020)	-.010* (.005)	.119* (.038)	.075* (.035)	.55	1.60

Table 2 continued

	c	ΔOMB	U	I	P	E	R <sup>2</sup>	D.W.
Corps of Engineers	-.185	-.231* (.102)	.028** (.011)	.001 (.004)	.069** (.027)	.015 (.027)	.59	1.31
Military Construction	-.224	-.079** (.024)	.016* (.008)	.007* (.004)	.001 (.023)	.001 (.021)	.68	1.98
NASA	-.098	-.014 (.023)	.009 (.006)	.001 (.003)	.032* (.015)	.014 (.014)	.49	2.15
Economic Dev. Admin.	-.507	-.109 (.139)	.103** (.022)	-.019 (.015)	.139* (.071)	.035 (.062)	.83	1.17
Office of Voc. Rehab.	.088	-.164* (.070)	-.019 (.016)	-.004 (.005)	.034 (.032)	.020 (.032)	.45	2.16
Public Health Service	-.367	-.414* (.069)	.080** (.013)	.008* (.004)	.145* (.027)	.045* (.025)	.91	1.62
Office of Education	-.214	-.032 (.027)	.044* (.020)	-.004 (.006)	.089* (.045)	-.016 (.049)	.40	1.70
<u>Agencies Supplying Primarily Universalistic Benefits</u>								
Food and Drug Administration	-.058	-.105* (.054)	.009 (.007)	-.000 (.002)	.041** (.015)	-.002 (.016)	.38	2.09
Federal Bureau of Investigation	-.014	-.014 (.024)	.003* (.002)	.000 (.001)	.001 (.004)	.002 (.004)	.16	2.26
Immigration and Natural. Svc.	-.067	-.252** (.060)	.012** (.003)	.000 (.001)	.013* (.017)	-.001 (.008)	.63	1.59
Federal Prison System	-.064	-.233** (.060)	.004 (.008)	.000 (.002)	.005 (.020)	.020 (.019)	.44	1.99
Bureau of Narcotics	-.025	-.007 (.047)	.005 (.005)	-.002 (.002)	-.004 (.010)	.016 (.009)	.32	2.20
Bureau of Customs	-.453	-.108** (.022)	.005** (.002)	.001 (.001)	.014** (.005)	.010* (.005)	.70	1.69
Bureau of the Public Debt	-.035	-.245** (.078)	-.001 (.008)	-.001 (.002)	.025 (.016)	.021 (.018)	.39	2.30

Table 2 continued

	c	ΔOMB	U	I	P	E	R <sup>2</sup>	D.W.
Secret Service	-.017	-.036 (.113)	.006 (.010)	-.005 (.003)	.004 (.024)	-.004 (.025)	.11	1.88
Internal Revenue Service	-.042	-.136* (.056)	.006 (.003)	-.002 (.001)	.024** (.007)	-.005 (.008)	.55	2.04
Bureau of the Mint	-.015	-.073** (.027)	.001 (.012)	-.010 (.004)	-.020 (.026)	.013 (.029)	.38	1.23
Bureau of Labor Statistics	-.171	-.191* (.082)	.030** (.009)	-.011** (.003)	.057** (.019)	.022 (.021)	.70	1.61
Bureau of Labor Standards	-.113	-.121** (.048)	.033 (.022)	-.026** (.007)	-.015 (.043)	-.028 (.044)	.81	1.89
Patent Office	.014	-.258** (.098)	-.001 (.005)	-.003 (.002)	.026* (.013)	-.019 (.014)	.41	1.61
Weather Bureau	.078	.138 (.128)	-.028 (.023)	-.004 (.006)	.053 (.040)	-.006 (.040)	.29	1.53
Geological Survey	-.147	-.215** (.069)	.027** (.008)	-.004 (.003)	.043* (.020)	.003 (.020)	.71	1.35
Coast and Geodetic Survey	-.080	-.100** (.033)	.006 (.008)	-.002 (.002)	.025 (.015)	.024 (.015)	.58	2.75
National Bureau of Standards	-.270	-.783 (.052)	.022 (.019)	.006 (.005)	.062* (.033)	.048 (.035)	.27	1.55
Census Bureau <sup>a</sup>	-.336	-.110* (.054)	.052 (.036)	-.017 (.012)	-.031 (.084)	.188* (.098)	.33	2.50

<sup>a</sup> The equation estimated for the Census Bureau also included dummy variables to register the impact of the constitutionally mandated decennial censuses.

Significance tests are one-tailed. \*\* =  $p < .01$ ; \* =  $p < .05$ .

The figures in Table 2 indicate that although only 4 estimates of the election year term are statistically significant, the signs of the estimates are in the predicted (positive) direction for 28 of the 37 agencies being examined. Given that the time series never exceed 32 years and are frequently shorter, conventional levels of significance become difficult to achieve with effects of the magnitude associated with the electoral dummy. It is prudent, therefore, to take account of the overall pattern of results. A null hypothesis that there is no difference in congressional behavior between election years and nonelection years implies that the sign of each estimate has a .5 probability of being either positive or negative. According to the relevant binomial probability distribution, that 28 of the 37 estimates were in the predicted direction means that this hypothesis can be rejected at the .01 level. There is, then, a glimmer of evidence for the proposition that Congress is somewhat more generous in its treatment of OMB budget estimates in election years.

But when those agencies supplying direct, constituency-oriented benefits are considered separately from those supplying more collective benefits, it is clear that any evidence of greater election year generosity is largely confined to the former category. Of the 19 agencies in this group, 17 tended to fare better in election years than in nonelection years. This was true of only 11 of the 18 agencies supplying more universalistic benefits. Similarly, the median estimate in the first category of agencies was .018, compared to .003 in the second category. Although only 2 of the 20 estimates

in the first category are significant at the  $p < .05$  level, 5 others would satisfy the  $p < .10$  criterion. And looking at the overall pattern of results, we can with a binomial probability test overwhelmingly reject the null hypothesis (no difference between election years and nonelection years) for the first group ( $p < .001$ ), while for the second category we cannot even come close. In short, the evidence in Table 2 does provide some support for our second hypothesis, i.e. that the tendency for Congress to treat agency requests more generously in election years is strongest for those agencies which directly supply particularistic, constituency-oriented benefits. Election year permissiveness, however, does not appear to extend very far among those agencies providing benefits which are more universalistic in nature.

As discussed earlier, we had suspected that agencies which sponsor federally funded construction projects would be especially benefited by election year considerations. This is because of the large measure of personal credit congressmen can take for securing such projects and attendant benefits for their districts. Contrary to our expectations, however, such agencies were not singled out for special favor. Estimates of the election year dummy for the Corps of Engineers, the Bureau of Reclamation, and the Economic Development Administration—.015, .003, .001, and .035, respectively—tended, if anything, to be smaller than estimates for other agencies in this category. To be sure, there are a number of factors which might serve to mitigate against an easily recognizable electoral cycle in spending

for "pet" projects. As Ferejohn (1974) notes, the Corps of Engineers receives appropriations on a year by year basis, even though its projects usually take 10 or more years to complete. As a result, decisions made over the previous 10 to 15 years create current spending obligations amounting to about 95 percent of the Corp's budget for a particular fiscal year. More importantly, once a project is undertaken funding for it is primarily a function of the construction schedule drawn up by the Corps, which is in turn largely determined by engineering requirements and other physical features of the project.

An important alternative hypothesis, of course, is that while overall appropriations for construction projects are not sensitive to the electoral calendar, the timing of announcements for new feasibility studies, surveys, planning starts, and new projects starts might be. Anagnason (1982), for instance, presents evidence indicating that the processing time for EDA and HUD grant applications and the number of grant award announcements appear to pick up as election day approaches. Testing this hypothesis, though, is beyond the scope of the present study.

At any rate, the hypothesis that any tendency for Congress to treat agency requests more generously in election years would be stronger for those agencies which supply particularistic, constituency-oriented benefits did receive some support. Whether one wishes to characterize these effects as large or small probably depends on one's perspective. The median estimate of this term for

agencies in this category, .018, implies that the change Congress makes in such an agency's budget estimate is, as a percentage of that estimate, about 2 percent larger in an election year.<sup>9</sup> In relation to the typical change Congress makes, an effect of this magnitude is fairly large; such changes rarely exceed plus or minus 10 percent, and are usually less than 5 percent. And in the case of a large agency, 2 percent of its budget amounts to many millions of dollars. On the other hand, an additional 2 percent in the appropriations it receives will probably not, for the typical agency, allow for any important expansion in its activities. Nor is this 2 percent something which can be readily counted upon; the large standard errors associated with the election year dummies (and the resultant few significant estimates) indicate an effect which is erratic and uncertain.

But more importantly, the effects upon congressional appropriations decisions exerted by the other variables specified in these equations are generally much more impressive than the influence exerted by election year considerations. First, Congress clearly and consistently reacts to the nature of the estimate submitted by OMB. Of the 37 estimates for this term reported in Table 2, 35 were in the predicted (negative) direction, and a large majority (22) were significant at the  $p < .05$  level.

Secondly, congressional action on OMB estimates was responsive to the rate of unemployment; 32 of the 37 estimates were in the predicted (positive) direction, and 13 were statistically significant. In contrast, the pace of inflation in the previous fiscal year had no

apparent effect. Barely half (23) of the estimates for this term were in the predicted (negative) direction, and most of them were clustered closely around zero.

Thirdly, the other political variable in the equation—the party agreement index—also registered strong and consistent effects. In 33 of the 37 equations reported in Table 2 the estimate of this term was in the predicted (positive) direction, and 21 of the estimates were statistically significant. The median estimate of .032 implies that a given agency would receive, as a percentage of its OMB estimate, 3.2 percent more from a Democratic Congress facing a Republican President than from a Democratic Congress facing a President of the same party. The partisan conflict registered by this variable, of course, is manifested in the interaction between Congress and OMB; nothing is implied about the behavior of either institution apart from the other. The strong effects associated with the party agreement index do indicate, though, that the role party differences play in the budgetary process is a large one.

As indicated above, evidence of greater election year generosity on the part of Congress was largely confined to those agencies providing particularistic, constituency-oriented benefits. The results displayed in Table 2 also revealed other interesting differences between the two sets of agencies. First, our model of congressional appropriations decisions does a better job overall of explaining the data in the first category, i.e. the agencies which provide particularistic, constituency-oriented benefits, than in the

second category; median  $R^2$ s were .49 and .39, respectively. One variable in particular which exerted a stronger influence in the first category than in the second was unemployment. The median estimate in the former group was .016, compared to .006 in the latter. Given the way these variables were scaled, an estimate of .016 implies that an additional 1 percent in unemployment results in a 1.6 percent increase in agency appropriations. Furthermore, congressional response to unemployment appeared to be particularly strong with regard to those agencies which sponsor major construction projects. Estimates of the unemployment term for the Corps of Engineers, Bureau of Reclamation, Military Construction, and Economic Development Administration were .028, .019, .016, and .103 respectively (3 of the 4 were statistically significant). As indicated earlier, these agencies were apparently not the objects of greater congressional year generosity. Evidently, though, Congress has reacted to high levels of joblessness in much the same manner as have governments going back to the pharaohs—with more and/or bigger public works projects (Garraty, 1978).

Another variable which registered stronger effects in the first category was the party agreement index. Budgets of agencies supplying particularistic, constituency-oriented benefits were a good deal more likely to be the objects of partisan controversy; of the 18 estimates of the party agreement index in this category, 13 were statistically significant, compared to 8 of the 18 estimates in the other category. Median estimates were .051 and .014, respectively. Perhaps this pattern of results should not come as too much of a

surprise. In a large sense, the Republican ideal of less government intervention in society and in the economy ultimately means providing fewer government goods and services to fewer groups of people. True, there are agencies supplying primarily universalistic benefits over which we would expect to observe partisan conflict and in fact do. Some of the largest estimates of the party agreement index in this category were for the Food and Drug Administration, a major regulatory agency, and (consistent with Fenno's account) the Bureau of Labor Statistics. Congressional action on the budgets of most agencies in this category, however, was not much affected by the balance of party power in the federal government. Indeed, none of the variables in our equations had much effect upon appropriations decisions regarding a number of agencies here, e.g. the Federal Bureau of Investigation, the Secret Service, or Bureau of Narcotics. Most of the time Congress simply appropriated them an amount equal to the OMB estimate, and any changes which were made were tiny. The  $R^2$ s for these agencies' equations were consequently quite low.

Before continuing, it is probably best to quickly summarize the results of this analysis. In its appropriations decisions, Congress has tended to treat the OMB estimates for agencies which provide particularistic, constituency-oriented benefits more favorably in election years than in nonelection years. This tendency does not appear to extend very far among those agencies providing benefits which are primarily universalistic in nature, nor are those agencies which sponsor construction projects singled out for special favor in

election years. Congressional action on the budgets of these two categories of agencies differed in other important ways as well. Appropriations decisions regarding those agencies which supply constituency-oriented benefits were influenced much more strongly by the level of unemployment in the U.S. economy and by whether it was the Democrats or the Republicans who were in control of Congress and the Presidency. Finally, although the effects associated with election year considerations were not trivial, the other political, economic, and institutional variables which were specified in our model played much more important roles in the appropriations process.

### III. AGENCY BUDGET ESTIMATES SUBMITTED BY OMB

In examining the effect of election year considerations upon the budgetary process, this study has looked only at the changes Congress makes in OMB estimates. However, the budget estimates for government agencies OMB submits to Congress at the beginning of each session may reflect anticipation of greater congressional generosity in election years. We would expect, though, that OMB responds to many of the same institutional, economic, and political factors which affect congressional appropriations decision. In order to accurately gauge the degree to which OMB estimates differ from election years to nonelection years it is thus important to specify these other variables. The model to be estimated, then, is as follows:

$$\Delta OMB_i = \alpha_i + \beta_{1i} \Delta CONGPFI_i + \beta_{2i} U + \beta_{3i} I + \beta_{4i} P + \beta_{5i} E + \mu_i$$

where  $\Delta OMB_i$  = the percentage change represented by the OMB estimate for an agency over the appropriations it received in the previous fiscal year.

$\alpha_i$  = a constant term.

$\Delta CONGPY_i$  = the percentage change Congress made in an agency's OMB estimate in awarding it appropriations during the previous fiscal year.

U = average unemployment rate in the previous fiscal year.

I = percentage change in the Consumer Price Index in the previous fiscal year.

P = the party agreement index (this is the same variable specified in the previous set of equations).

E = a dummy variable which takes on the value of 1 for budget submitted in election years, i.e. odd-numbered fiscal years, 0 otherwise.

As before, we hypothesize there to be an inverse relationship between budgetary actions taken by Congress and actions taken by OMB; ceteris paribus, agencies which received relatively generous treatment from Congress in the previous fiscal year will receive a relatively lower OMB estimate. The  $\Delta CONGPY$  terms should thus have negative signs. Our predictions about the unemployment term and inflation terms are the same as before, i.e. signs of the estimates will be

positive for the former but negative for the latter.

The party agreement index is again meant to reflect Democratic and Republican differences over the desirability of government growth. If these differences are present, the percentage growth represented by OMB estimates over an agency's previous fiscal year appropriations should be relatively smaller when a Republican administration faces a Democratic Congress, but relatively larger when the administration is Democratic and the Congress Republican. Because the first situation is valued -1 and the second valued +1, signs of the estimates of the party agreement index should be negative, not positive as in the previous analysis.

The final variable is the election year dummy. As was indicated in the introduction, two plausible strategies which OMB might adopt run in exactly opposite directions. A simple compensatory strategy would lead to somewhat lower OMB estimates in election years; alternatively, OMB might attempt to accommodate Congress by submitting somewhat higher estimates in election years so as not to provoke even greater generosity. In the following analysis we will thus look for estimates running strongly in either a negative or positive election.

The results of this analysis are presented in Table 3. As before, the Durbin-Watson statistics indicate that serial correlation does not pose any real problems. On the other hand, the model which

[TABLE 3 HERE]

TABLE 3

THE EFFECT OF ELECTION YEARS AND OTHER POLITICAL, ECONOMIC,  
AND INSTITUTIONAL VARIABLES UPON OMB ESTIMATES

	c	ΔCONGPFFY	U	I	P	E	R <sup>2</sup>	D.W.
<u>Agencies Supplying Direct, Constituency-Oriented Benefits</u>								
Extension Svc.	.183	-.292 (.654)	-.028 (.020)	-.010 (.020)	.045 (.042)	.011 (.046)	.23	2.12
Farmers Home Administration	.157	-.384 (.314)	-.018 (.048)	.011 (.018)	.022 (.110)	-.036 (.117)	.09	2.48
Rural Electri- fication Admin.	.022	.477 (.521)	.010 (.015)	-.008* (.005)	-.047 (.034)	.022 (.036)	.17	1.78
Soil Conservation Service	.062	.016 (.303)	-.001 (.014)	-.010* (.004)	-.016 (.033)	-.024 (.035)	.18	1.78
Forest Service	-.087	.061 (.399)	.040* (.021)	-.011* (.006)	-.031 (.040)	-.026 (.045)	.26	1.83
Bureau of Reclamation	-.204	-1.573** (.612)	.023 (.047)	.004 (.014)	.005 (.120)	.174 (.114)	.31	2.09
Bureau of Land Management	.068	.031 (.581)	.021 (.030)	-.007 (.010)	-.056 (.065)	.070 (.071)	.09	2.00
National Park Service	.109	-1.260* (.687)	.029 (.044)	-.041** (.013)	.083 (.099)	-.088 (.103)	.32	1.62
Bureau of Indian Affairs	.277	.081 (.556)	-.025 (.033)	-.012 (.008)	-.071 (.064)	.080 (.067)	.18	2.23
Fish and Wild- Life Service	-.096	-.741 (.495)	.049 (.049)	-.009 (.014)	-.034 (.092)	-.023 (.094)	.19	2.23
Bureau of Mines	.217	.088 (.623)	-.035 (.039)	.000 (.011)	-.060 (.071)	.127 (.076)	.21	2.25
Bonneville Power Administration	-.317	-1.090* (.578)	.101 (.062)	.008 (.016)	-.261* (.118)	.004 (.121)	.50	1.52

Table 3 continued

	c	ΔCONGPFFY	U	I	P	E	R <sup>2</sup>	D.W.
Corps of Engineers	.006	-.294 (.306)	.010 (.022)	.003 (.007)	-.106* (.050)	.028 (.050)	.30	1.28
Military Construction	1.350	2.027 (2.211)	-.120 (.103)	-.008 (.044)	-.224 (.249)	-.189 (.228)	.20	2.76
NASA	-.260	-.651 (2.801)	.126* (.071)	-.070* (.031)	-.059 (.181)	.084 (.169)	.43	0.92
Economic Dev. Admin.	-.573	-1.421** (.436)	.104* (.055)	.065 (.022)	-.375** (.116)	-.178 (.106)	.75	2.70
Office of Voc. Rehab.	.196	1.512 (.687)	.012 (.053)	.004 (.015)	-.051 (.107)	-.048 (.106)	.31	2.05
Public Health Service	-.444	-.865* (.341)	.117* (.047)	.021 (.012)	.035 (.090)	-.065 (.079)	.44	2.13
Office of Education	.743	-.589 (1.220)	-.077 (.156)	.024 (.046)	-.272 (.322)	.042 (.358)	.09	2.23
<u>Agencies Supplying Primarily Universalistic Benefits</u>								
Food and Drug Administration	.047	.434 (.615)	.033 (.024)	-.016* (.007)	-.039 (.057)	-.014 (.058)	.22	2.17
Federal Bureau of Investigation	.078	-1.620 (1.040)	.000 (.014)	.004 (.005)	-.027 (.032)	-.066 (.034)	.17	1.82
Immigration and Natural. Svc.	.133	.380 (.424)	-.041 (.011)	-.002 (.003)	.034 (.022)	-.028 (.025)	.20	1.90
Federal Prison System	.119	.712 (.501)	-.008 (.025)	.001 (.008)	.195 (.057)	.017 (.062)	.33	2.19
Bureau of Narcotics	.183	-.846 (1.201)	-.020 (.026)	-.010 (.008)	-.007 (.055)	-.001 (.053)	.14	2.36
Bureau of Customs	.041	.583 (1.140)	-.008 (.019)	.018 (.006)	-.004 (.044)	-.017 (.048)	.28	1.60
Bureau of the Public Debt	-.186	-1.272** (.349)	.037* (.015)	-.001 (.005)	.032 (.034)	-.058 (.038)	.47	1.67



Table 3 continued

	c	ΔCONGPFFY	U	I	P	E	R <sup>2</sup>	D.W.
Secret Service	.094	-.127 (.330)	-.002 (.018)	-.002 (.005)	.070 (.039)	-.023 (.044)	.14	1.38
Internal Revenue Service	.079	.066 (.573)	.002 (.011)	-.006* (.003)	-.016 (.027)	-.009 (.027)	.11	2.34
Bureau of the Mint	-.144	.040 (1.221)	.039 (.090)	.008 (.028)	.050 (.189)	.137 (.213)	.03	2.41
Bureau of Labor Statistics	-.147	-.928** (.279)	.054** (.018)	-.008 (.005)	-.002 (.042)	-.056 (.042)	.41	1.84
Bureau of Labor Standards	-.454	-.953 (.667)	.139 (.115)	.068 (.032)	-.016 (.223)	-.303 (.215)	.47	2.44
Patent Office	.092	.130 (.356)	-.002 (.012)	-.002 (.004)	-.010 (.029)	-.033 (.029)	.06	1.45
Weather Bureau	-.235	-.289 (.616)	.073 (.046)	-.003 (.013)	.000 (.101)	-.012 (.088)	.24	2.72
Geological Survey	.014	-.532 (.373)	.030 (.022)	.009 (.007)	-.102* (.056)	-.082 (.052)	.44	2.57
Coast and Geodetic Survey	-.196	.748 (2.151)	.058 (.065)	.006 (.018)	.041 (.164)	.063 (.135)	.11	1.42
National Bureau of Standards	-.394	.700 (.890)	.126 (.077)	.029 (.022)	.149 (.140)	.024 (.154)	.22	1.43
Census Bureau <sup>a</sup>	.457	-.316 (.734)	.024 (.138)	-.048 (.045)	-.411 (.334)	-.048 (.390)	.75	2.31

<sup>a</sup> The equation for the Census Bureau also included dummy variables to control for the effects of the constitutionally mandated decennial censuses.

Significance tests for the election year dummy were two-tailed. All others were one tailed. \*\* =  $p < .01$ ; \* =  $p < .05$ .

was estimated here did a much poorer job of explaining the data than did the model of congressional appropriations decisions. The median  $R^2$  was only .23, compared to .45 in the previous set of equations.

Also in contrast to the previous analysis, the model did no better predicting OMB action on budgets of the constituency-oriented agencies than on the budgets of agencies providing primarily universalistic services; median  $R^2$ s for each category (.23 and .22, respectively) were virtually identical.

With such low  $R^2$ s it is not surprising that none of the variables had much systematic effect either. With the election year dummy, of course, we were looking for coefficients to run strongly in either a negative or positive direction. Overall, though, there is not much of anything going on here. A slight majority (23) of the signs were negative, but none were statistically significant in either direction.

When the two categories of agencies are considered separately, however, we see that the negative coefficients tend to be associated with the agencies which provide primarily universalistic benefits. Of the 18 election year terms in this category, 14 are negative, compared to 9 of 19 for the agencies which are constituency-oriented. The only trouble is that if OMB were to counter Congress by submitting somewhat lower estimates in election years, it should have done so for the constituency-oriented agencies. If there is a real effect here, then, it is for the wrong set of agencies. We are thus inclined not to attach much importance to this difference between agency categories.

The performance of the other variables in the equations was similarly lackluster. Although Congress appeared to systematically react to the nature of the estimate submitted by OMB for a particular government agency, OMB does not appear to have reacted to what Congress had done to an agency's estimate in the previous fiscal year. Only 20 of the 37 coefficients for the  $\Delta\text{CONGPY}$  term were in the predicted (negative) direction, although a fair number (7) were statistically significant. The economic variables also added very little to our ability to predict OMB action on agency budgets. Only about two thirds of the unemployment term coefficients and barely half of the inflation term coefficients were in the predicted direction. The lack of support for the hypotheses concerning the economic variables is somewhat surprising, given that the level of government spending is perhaps the most important macroeconomic policy over which the executive branch can exert some control.

There is a little consolation, perhaps, in the fact that the party agreement index tended to pick up effects consistent with our predictions in the constituency-oriented category; of the 19 coefficients, 14 bore the predicted (negative) sign. Overall, however, the performance of this index, which had registered such strong, consistent effects in the congressional equations, failed to give any real support to the hypothesis of party differences. Only 23 were in the predicted direction, and only 4 were statistically significant.

It is probable that we could find other variables (or other

specifications of the variables which are already in the model) which would lead to improvements in explanatory power. Trying some of the more obvious alternatives, though, did little to help matters. One might hypothesize, for example, that during Republican administrations OMB might submit lower estimates regardless of the make-up of the Congress. But a dummy variable which took on the value of 1 when the President was Republican and 0 when he was a Democrat worked no better than the party agreement index.

Similarly, a potential problem with the economic variables is the fact that OMB submits its budget estimates when only half (and since 1977, only a quarter) of the year these two variables reflect has actually elapsed. Our decision to specify these variables in this manner was made out of a sense that OMB would want budget estimates to be responsive to economic conditions which obtained at the time the next fiscal year began, and that by the middle of the fiscal year OMB would have a reasonably good idea of what the rest of the year held in store. But it is quite possible we were wrong, and that there should be a longer lag on these variables. Accordingly, we reestimated a large subset of the equations in Table 3 with two different lags on these variables: first, two fiscal years prior to the one to which the estimates pertain; second, the prior calendar year. For example, the percentage changes that OMB recommended be made in agency budgets for fiscal year 1973 (July 1972 through June 1973) were submitted to Congress in January 1972. In predicting these changes, the first alternative used the average inflation and unemployment rates for

fiscal year 1971 (July 1970 through June 1971), while the second used the average rates for calendar year 1971. At any rate, neither of these changes made much difference.

Finally, another important potential reason for the inability of this model to explain much variance may be that we are examining the wrong dependent variable. The OMB estimates and congressional appropriations being analyzed here are, as indicated earlier, for new budgetary authority, which empowers agencies to spend money for up to several years into the future. These figures are not for outlays, which pertain to the amount of money to be spent in the next fiscal year only. Evidence in a recent paper by Kamlet and Mowery (1981), though, suggests that in attempting to achieve short run fiscal policy objectives it is in fact agency outlays with which the OMB is primarily concerned. In contrast, they argue, congressmen and executive agency bureaucrats are more concerned about new budgetary authority.<sup>10</sup> Unfortunately Kamlet and Mowery do not report any evidence on Congress, and examining the behavior of either Congress or the OMB with regard to outlays is beyond the scope of the present analysis. Suffice it to say for now that the agency budget estimates OMB submitted to Congress (expressed as a percentage of previous fiscal year appropriations) tended not to systematically vary with any of the explanatory variables in our model.<sup>11</sup>

#### IV. THE BOTTOM LINE: OVERALL CHANGES IN AGENCY APPROPRIATIONS

In looking for election year effects upon the budgetary

process, we have examined separately OMB estimates for government agencies as percentage changes over previous fiscal year appropriations (Table 3) and the percentage changes Congress makes in the OMB estimates (Table 2). We turn now to an analysis of the products of these two sets of actions—the overall changes in agency appropriations from one fiscal year to the next.

Our main hypotheses are analogous to those tested in the congressional equations: (1) Changes in agency appropriations over the previous fiscal year will be more positive in election years than in nonelection years, and (2) this tendency will be stronger for those which supply particularistic, constituency-oriented benefits than for those which provide benefits which are primarily universalistic. As before, the model to be estimated here will specify inflation and unemployment terms, our predictions being that coefficients of the former should be negative and those of the latter negative.

Because we are no longer interested in the behavior of the Congress vis-a-vis the OMB (or the OMB vis-a-vis the Congress), however, the present model will differ from the previous ones in a couple of important ways. First, we can simply dispense with the  $\Delta OMB$  and  $\Delta CONGPFFY$  terms, which referred to prior actions taken by the OMB and by Congress, respectively. Secondly, we cannot adopt the party agreement index used in the previous set of equations. This index was designed to register effects which derived from whether or not the legislative and executive branches were controlled by the same party. Our concern now, though, is with the effects of party upon actions

taken upon agency budgets in a given fiscal year by both institutions.

The party agreement index will thus be replaced by two terms, the first indicating the party of the President, the second, the party which holds a majority in the Congress.

The resultant model is of the form:

$$\Delta APP_i = \alpha_i + \beta_{1i}U + \beta_{2i}I + \beta_{3i}PP + \beta_{4i}PC + \beta_{5i}E + \mu_i$$

where  $\Delta APP_i$  = the percentage change in an agency's appropriations over what it received in the previous fiscal year.

$\alpha_i$  = a constant term.

U = the average unemployment rate during the previous fiscal year.

I = the percentage change in the Consumer Price Index during the previous fiscal year.

PP = a dummy variable which takes on the value of 1 where the President was a Democrat, 0 otherwise.

PC = a dummy variable which taken on the value of 1 when the Democrats are the majority party in Congress, 0 otherwise.

E = a dummy variable which takes on the value of 1 for budgets considered during election years, 0 otherwise.

[TABLE 4 HERE]

TABLE 4

## CHANGES IN AGENCY APPROPRIATIONS FROM PREVIOUS FISCAL YEAR

	c	U	I	PP	PC	E	R <sup>2</sup>	D.W.
<u>Agencies Supplying Particularistic, Constituency-Oriented Benefits</u>								
Extension Svc.	.320	-.004 (.021)	-.011* (.005)	-.072 (.042)	-.349 (.433)	.029 (.040)	.28	2.24
Farmers Home Administration	-.519	-.048 (.065)	.018 (.019)	-.063 (.135)	1.432 (1.409)	.030 (.127)	.06	2.87
Rural Electrification Admin.	-.037	.022 (.015)	-.009** (.004)	.028 (.030)	-.098 (.308)	.023 (.028)	.30	2.23
Soil Conservation Service	.186	.016 (.016)	-.013** (.004)	-.025 (.031)	-.286 (.321)	-.006 (.030)	.33	2.41
Forest Service	-.125	.065** (.025)	-.010 (.006)	-.001 (.050)	-.118 (.520)	-.040 (.048)	.35	2.25
Bureau of Reclamation	.808	.093 (.057)	-.009 (.014)	.040 (.114)	-2.240 (1.180)	.148 (.109)	.19	1.71
Bureau of Land Management	.079	.032 (.033)	-.004 (.008)	.066 (.066)	-.314 (.684)	.082 (.063)	.12	2.11
National Park Service	.338	.042 (.055)	-.040** (.014)	-.025 (.110)	-.405 (1.141)	-.096 (.105)	.28	1.56
Bureau of Indian Affairs	-.001	.016 (.027)	-.012* (.007)	.015 (.053)	-.025 (.550)	.074 (.051)	.20	1.91
Fish and Wild-Life Service	.107	.047 (.046)	-.023* (.013)	.024 (.089)	-.336 (.828)	.020 (.081)	.29	1.84
Bureau of Mines	-.281	-.023 (.039)	.002 (.011)	-.002 (.074)	.626 (.752)	.168* (.070)	.24	2.17
Bonneville Power Administration	-.042	.090 (.072)	-.001 (.019)	.358** (.131)	-.965 (1.366)	.172 (.126)	.32	2.11

Table 4 continued

	c	U	I	PP	PC	E	R <sup>2</sup>	D.W.
Corps of Engineers	.248 (.022)	.063** (.005)	-.003 (.044)	.007 (.450)	-.960* (.041)	.040	.28	1.35
Military Construction	.167 (.062)	-.033 (.028)	.012 (.169)	— <sup>a</sup>	-.131 (.154)		.10	2.89
NASA	-.320 (.061)	.122* (.028)	-.068* (.167)	— <sup>a</sup>	.113 (.151)		.41	.99
Economic Dev. Admin.	-.487 (.059)	.058 (.034)	.036 (.168)	— <sup>a</sup>	-.106 (.160)		.32	2.47
Office of Voc. Rehab.	-.558 (.049)	.033 (.014)	-.067 (.101)	1.566 (.881)	-.046 (.086)		.20	2.06
Public Health Service	-.215 (.034)	.109** (.010)	.004 (.071)	-.056 (.625)	.035 (.060)		.45	1.16
Office of Education	.590 (.169)	-.065 (.042)	.014 (.337)	-.309 (.348)	-.070 (.321)		.09	2.34
<u>Agencies Supplying Primarily Universalistic Benefits</u>								
Food and Drug Administration	-.108 (.028)	.036 (.007)	-.014* (.056)	-.025 (.574)	.176 (.053)		.27	2.10
Federal Bureau of Investigation	.106 (.018)	.001 (.004)	-.001 (.036)	-.095 (.366)	-.052 (.034)		.10	2.10
Immigration and Natural. Svc.	-.193 (.010)	-.006 (.003)	-.037* (.020)	.489* (.209)	-.022 (.019)		.29	2.17
Federal Prison System	-.170 (.026)	-.002 (.006)	-.126* (.051)	.486 (.530)	.022 (.049)		.22	2.14
Bureau of Narcotics	.165 (.028)	-.012 (.008)	.080 (.058)	-.125 (.507)	.019 (.048)		.24	2.46
Bureau of Customs	-.005 (.020)	.004 (.005)	-.033 (.041)	-.019 (.421)	-.008 (.039)		.27	1.80
Bureau of the Public Debt	-.656 (.017)	-.010 (.004)	-.038 (.035)	1.176** (.357)	.015 (.033)		.38	1.77

Table 4 continued

	c	U	I	PP	PC	E	R <sup>2</sup>	D.W.
Secret Service	-.467 (.024)	-.028 (.006)	-.004 (.048)	-.050 (.491)	1.278** (.045)	-.025	.29	1.84
Internal Revenue Service	-.110 (.012)	.000 (.003)	-.006* (.025)	-.003 (.255)	.293 (.024)	-.013	.25	2.33
Bureau of the Mint	-.837 (.095)	-.035 (.024)	-.005 (.191)	.051 (1.970)	1.733 (.181)	.162	.08	2.59
Bureau of Labor Statistics	-.219 (.022)	.051* (.005)	-.020** (.044)	-.040 (.451)	.204 (.042)	-.001	.55	1.36
Bureau of Labor Standards	-.033 (.096)	.095 (.027)	-.017 (.198)	-.072 (.173)	-.123 (.169)	-.212	.22	1.98
Patent Office	.109 (.013)	.001 (.003)	-.005 (.027)	-.020 (.265)	-.050 (.025)	-.043	.20	1.91
Weather Bureau	-.296 (.069)	.055 (.017)	-.006 (.121)	-.033 (1.276)	.284 (.110)	-.037	.19	2.78
Geological Survey	-.169 (.025)	.045* (.006)	-.001 (.050)	.051 (.516)	.064 (.048)	-.048	.24	2.36
Coast and Geodetic Survey	-.840 (.066)	.020 (.016)	.010 (.116)	-.116 (1.227)	1.391 (.106)	.091	.24	1.47
National Bureau of Standards	-1.423 (.066)	.107 (.019)	.036 (.126)	-.315* (1.253)	1.829 (.118)	.060	.38	1.39
Census Bureau <sup>b</sup>	.319 (.102)	.154 (.025)	-.030 (.205)	.157 (2.137)	-2.031 (.210)	.366*	.85	2.16

<sup>a</sup> This term could not be specified here because the Democrats controlled Congress during the entire time series for this agency.

<sup>b</sup> The equation for the Census Bureau also contained dummy variables to control for the effects of the constitutionally mandated decennial censuses.

Significance tests are one-tailed. \*\* =  $p < .01$ ; \* =  $p < .05$ .

Results derived from this model are reported in Table 4.

There are few more equations than before which have serial correlation problems, but the Durbin-Watson statistics remain generally well-behaved. The model estimated here did a slightly better job of explaining the data than did the OMB model (the median  $R^2$  was .27, with virtually no differences between agency categories) but a much poorer job than the congressional model.

Turning to particular variables, we see that the new party control measures did not top anything systematic; signs of the presidential and congressional party dummies were in the hypothesized (positive) direction less than half the time (15 of 37 and 16 of 34, respectively). In short, Democratic control of either the Congress or the Presidency did not tend to result in more budgetary growth for this sample of agencies. On the other hand, overall changes in agency appropriations were affected more consistently by the nature of economic conditions than were the changes proposed by the OMB. Over two thirds of the coefficients associated with the unemployment and inflation terms were in the predicted direction, and a pretty fair number (6 and 11, respectively) were significant at the .05 level. Turning finally to the election year dummies we see that signs of the coefficients were in the predicted direction in only 12 of the 19 equations for constituency-oriented agencies and in only 7 of the 18 equations for agencies in the other category. As was the case in the OMB equations, then, there was not a tendency for changes in agency appropriations to be more positive in election years than in

nonelection years.

Now this is not to say that the election year generosity on the part of Congress which we uncovered earlier was not in evidence here. A comparison of election year terms across Tables 2, 3, and 4 shows that in virtually every case in which Congress had tended to treat an agency more favorably in election years, overall percentage changes in its appropriations in election years were more positive than would have been true had the percentage changes proposed by OMB remained unaltered. However, the magnitude of the percentage changes made by Congress in OMB estimates was on the average, much smaller than the percentage changes these estimates represented over previous fiscal year appropriations. Moreover, the median correlation (Pearson  $r$ ) between the percentage change OMB estimates represent over previous fiscal year appropriations and the percentage change in actual appropriations over those received in the previous fiscal year was .87. In contrast, the median correlation between overall change in appropriations and the percentage change Congress made in OMB estimates was only .15. In other words, changes in agency appropriations are far more a function of the budget estimates which come out of OMB than of what Congress does to these estimates. Consequently, the results of this analysis approximated the OMB findings much more closely than the congressional findings.

## V. CONCLUSION

The analysis reported above generated evidence supportive of

the hypothesis that Congress treats the budgets of agencies which supply particularistic, constituency-oriented benefits more favorably in election years than in nonelection years. There did not appear to be any greater election year generosity on the part of Congress with regard to those agencies which perform primarily universalistic services. The data also revealed other important differences in congressional treatment of these two groups of agencies. In particular, the appropriations Congress awarded the constituency-oriented agencies were influenced much more strongly by the level of unemployment in the economy and by the balance of party power in the federal government.

Although the average effect associated with election years was not negligible, the influence of the other political, economic, and institutional variables specified in this battery of equations was far more impressive. Furthermore, the impact of congressional election year generosity upon the appropriations process is quite limited. This is because overall changes in agency appropriations are much more a function of the budget estimates submitted to Congress by OMB than of what Congress does to these estimates. And given that there were no important differences evident in OMB behavior between election years and nonelection years, overall trends in actual appropriations were not much affected by election year considerations either.

Probably the most important finding which we had not anticipated was that the equations we estimated did a much better job of explaining congressional appropriations decisions than actions

taken by OMB. True, Davis, Dempster, and Wildavsky (1966, 1973) report a similar pattern of results, but differences here were much starker than in their studies. Although Congress reacted to the nature of the estimate submitted by OMB for a given agency, OMB did not appear to react to how Congress had treated an agency's estimate in the previous fiscal year. Congressional budgetary actions also reflected whether the executive and legislative branches were controlled by the same party or by different parties. Finally, it was Congress, not OMB, which appeared to be more attune to national economic conditions.

Now this is not to say that we know nothing about OMB, or that previous researchers have found its behavior inexplicable. In particular, previous research by Crecine and his collaborators has shed a great deal of light on the operation of this institution. Their work, however, has focused primarily upon internal OMB decision-making, the relationships between OMB and executive agencies, and the behavior of OMB in the context of executive branch budget-making. The results of this analysis indicate that as we take a broader view of the environment in which this institution functions, our ability to explain what it does decreases rapidly.

## FOOTNOTES

1. Such a situation, of course, poses an n-person prisoner's dilemma in which the noncooperative solution is out-of-control spending. As Mayhew [1974] puts it, "There is a primal danger here that any taxing and spending body has to come to grips with" [p. 145]. Congress has historically dealt with this problem, he continues, by paying some members "internal currency" for engaging in "institutional protective activities" (i.g. guarding the Treasury) "that are beyond or even against their own electoral interests" [p. 146]. The most important rewards for this sort of service have been positions on the three "control committees" (Appropriations, Rules, Ways and Means), which are invested with special power and prestige.

It might be argued that election year "permissive moods" are exactly what these institutional safeguards are meant to counter. But as Fenno's study makes clear, these committees are ultimately responsible to the parent body and must, at least partially, accommodate its moods and expectations. In fact, his analysis of the House Appropriations Committee lends even more support to our second hypothesis—although expected to guard the Treasury, the Committee is also expected to cater to individual members' electoral needs, mainly by supporting their "pet projects."

2. Ferejohn (1974) found evidence of this sort of phenomenon in his

analysis of the Corps of Engineers. If the Budget Bureau recommended very few new starts, Congress would simply add several of them. He concluded that, "Apparently, if the Bureau wants to minimize the number of new starts in a given year, it should recommend about 14 or 15 projects rather than none" [p. 85].

3. OMB estimates and final appropriations figures for these agencies were reported annually in the Senate Document Appropriations, Budget Estimates, Etc., in the section titled, "Itemized Comparison of Budget Estimates and Appropriations Arranged by Appropriations Acts."
4. In a handful of instances several line items which customarily appeared under an agency in the regular annual appropriations act did not, but appeared instead in a subsequent supplemental act. In these cases these appropriations were counted toward the agency's funding for that year. In all other cases the funds appropriated in deficiency and supplemental acts were for line items already covered in the regular annual act. As stated above, these figures were almost always very small, and were not included in the following analyses.
5. The 3 agencies in Fenno's study which were not analyzed here were two extremely small divisions in the Labor Department (the Wage and Hours Division and the Women's Bureau) and the Social Security Administration, which was dropped because of the



frequent incomparability of figures reported from one year to the next.

6. The only agency in the Interior Department not included in this category was the Geological Survey. Programs and agencies which were included but which do not appear in the Agriculture, Interior, or Public Works bills are as follows: the Vocational Rehabilitation Service, which provided technical and financial support to states, local communities, and other organizations and individuals for a wide variety of services to the disabled; the Public Health Service, which distributed funds to state and local health services, financially assisted health professional and educational institutions, and funded grants for planning, research, and improving the delivery of local health services; the Office of Education, which funded construction of school and university facilities and sponsored several other programs of benefit to teachers and students. As Sharkansky's (1965) study demonstrated, the Office of Education seized the opportunity presented by Sputnik and the perceived "education gap," and succeeded in becoming the conduit for direct benefits from the federal government to major groups with interests in education. Due in part to the strong political backing it thus received from these interests, the Office of Education enjoyed a very rapid rate of growth during most of the post-1958 period.
7. This equation is actually the first equation of a reduced form

two equation simultaneous equations model, but for the sake of presentational ease we discuss the equations separately. As will be seen later, the dependent variable in the second equation in this system is the  $\Delta OMB$  term. This system is recursive, however, so OLS is an appropriate estimation technique. See Johnston (1972) p. 377.

8. Even after deflating into constant dollars, the median correlation (Pearson  $r$ ) between agency appropriations figures and a time counter was .86. In contrast, the median correlation between time and the percentage changes in agency appropriations from what they received in the previous fiscal year was only .11.
9. Tabular analyses of these data also showed that for 12 of the 19 agencies in this category, the appropriations they received from Congress in both election years and nonelection years was, on average, less than their OMB estimate, not more. It is thus far more accurate to characterize any election year generosity as a somewhat more permissive attitude toward spending (which is consistent with Fenno's description), and not as a wild spending spree.
10. Kamlet and Mowery also point out that differences between the OMB and the agencies in the emphasis placed on outlays versus new budgetary authority may result in a budgetary tradeoff, i.e. agencies will accept a lower level of outlays for the upcoming

fiscal year in return for somewhat more obligational authority to apply to future years. The evidence they present, however, indicates that any such trades were generally confined to the Kennedy-Johnson years, and that there has not been a tendency for budgetary authority granted in previous fiscal years to build up over time.

11. It should be noted that we also examined the possibility that OMB behavior depended upon the type of election year. More specifically, we suspected that OMB budget estimates might allow for the most growth over the previous fiscal year when the incumbent President is running for reelection. However, a simple tabular analysis which differentiated between (1) years in which the incumbent President was running, (2) years in which the incumbent was a lame duck, and (3) congressional byelection years revealed no systematic evidence of higher OMB estimates in presidential reelection years.
12. Use of such a variable would be problematic if, as is the case today, one major party controlled the House and the other controlled the Senate. There were, however, no instances of divided control during the time period examined in this study. A possible objection to this measure is that it throws away too much data, and should have made finer gradations, e.g. the Democratic percentage in the House. Our use of the dummy variable specification, however, was based on a sense that it was

much more important to register the fact that a party had a majority (and thus control of leadership positions and all committee chairmanships) than the actual size of its majority. Specification of the party agreement index used previously was also based upon this consideration, and it, of course, performed very well in the congressional equations.

## DATA SOURCES

Budgetary data were taken from the Annual Senate Document Appropriations, Budget Estimates, Etc., the section entitled "Itemized Comparisons of Budget Estimates and Appropriations Arranged by Senate Acts."

A synopsis of agency activities can be found in the United States Government Manual, published annually by the Office of the Federal Register, National Archives and Records Service, General Services Administration.

The Federal Government Purchases of Goods and Services Implicit Price Deflator time series was taken primarily from The National Income and Product Accounts of the United States, 1929-74, Statistical Tables. Data after that date are taken from monthly issues of the Survey of Current Business. Both are published by the Bureau of Economic Analysis, U. S. Department of Commerce.

The Unemployment and the Consumer Price Index figures were taken from issues of the Monthly Labor Review, Bureau of Labor Statistics, U S. Department of Labor.

## REFERENCES

- Anagnoson, J. Theodore. "Federal Grant Agencies and Congressional Election Campaigns." American Journal of Political Science 26 (1982):547-561, forthcoming.
- Crecine, J. P.; Kamlet, Mark; Mowery, Dave; and Winer, Mark. "The Relative Influence of the Office of Management and Budget in the Executive Branch Budgetary Process." Research in Public Policy Analysis and Management, JAI Press, forthcoming.
- Davis, Otto A.; Dempster, M. A. H.; and Wildavsky, Aaron. "A Theory of the Budgetary Process." American Political Science Review 60 (1966):529-547.
- \_\_\_\_\_. "Toward a Predictive Theory of Government Expenditures: U. S. Domestic Appropriations." British Journal of Political Science 4 (1974):419-452.
- Fenno, Richard F. The Power of the Purse: Appropriations Politics in Congress. Boston: Little, Brown, 1966.
- Ferejohn, John. Pork Barrel Politics. Stanford: Stanford University Press, 1974.
- Fiorina, Morris. P. Congress: Keystone of the Washington Establishment. New Haven: Yale University Press, 1977.
- Johnston, J. Econometric Methods. New York: McGraw-Hill, 1972.

Kamlet, Mark S.; and Mowery, David C. "The Budgetary Base in Federal Resource Allocation." American Journal of Political Science 24 (1980):804-821.

Mayhew, David R. Congress: The Electoral Connection. New Haven: Yale University Press, 1974.

McConnell, Grant. Private Power and American Democracy. New York: Alfred A. Kropf, 1966.

Mowery, David; Kamlet, Mark; and Crecine, J. P. "Presidential Management of Fiscal and Budgetary Policy." Political Science Quarterly 95 (1980):395-425.

Sharkansky, Ira. "Agency Requests, Gubernatorial Support, and Budget Success in State Legislatures." American Political Science Review 62 (1968):1220-1231.

Tufte, Edward R. Political Control of the Economy. Princeton: Princeton University Press, 1978.

Wanat, John. Introduction to Budgeting. North Scituate, Massachusetts: Daxbury Press, 1978.